

19-0114-01**Emission Summary****Permit Number:** 970452P**Source Status:** New ☐ Modification ☐ Expansion ☐ Relocation ☐ **Permit Status:** New ☒ Renewal ☐PSD ☐ NSPS ☒ NESHAPs ☒ **Previous Permit Number:** Construction _____ Operating _____

	Pounds/Hour			Tons/Year				Date of Data	*	Applicable Standard 1200-3-
	Actual	Potential	Allowable	Actual	Potential	Allowable	Net Change			
TSP	0.10	0.67	0.67	0.00	0.17	0.17		6/17/15		40 CFR 60.4205(a)
SO ₂		Neg.			Neg.			6/17/15		14-.03(5)
CO	0.60	14.15	14.15	0.03	3.54	3.54		6/17/15		40 CFR 60.4205(a)
HC	0.10	1.61	1.61	0.00	0.40	0.40		6/17/15		40 CFR 60.4205(a)
NO _x	6.91	11.42	11.42	0.35	2.85	2.85		6/17/15		40 CFR 60.4205(a)

Source of data is the application dated June 17, 2015.

The SO₂ emissions were calculated using 15ppm sulfur content of the fuel (NSPS requirement), assuming all available sulfur is converted to SO₂, and shown to be negligible.

It is assumed that Hydrocarbons will be converted to VOCs.

The ton per year emissions were calculated at 500 hours of operation per year based on the guidance found in the Seitz memo regarding the PTE determination for emergency engines. Allowable emissions for fee purposes are equal to the potential emissions.

The allowable emission limits from 40 CFR part 60 subpart IIII are in units of grams/kilowatt-hour. Each standard was reduced to lb/hr using the engine power output, in kilowatts, and a conversion factor of 453.592 grams per pound.

PERMITTING PROGRAM: CAM DATE: August 26, 2015

CONSTRUCTION PERMIT SUMMARY REPORT

Company Name: TN Dept. of General Services – Metro Center Labor Workforce Development File Number: 19-0114 EPS Initials: CAM

Permit Number(s): 970452P Source Point Number(s): 01

Application Received (date): June 19, 2015 Application Complete (date): June 19, 2015

Air Quality Analysis Performed? Yes ☐ No ☒

Briefly describe the project: (new source, modifications) (what the process is) (type controls proposed) (emissions expected, qualitative) (replacing what sources) (background information)

This is a new internal combustion diesel-fired engine (755 hp) used for an emergency generator. This emergency engine is subject to NSPS, **Subpart IIII**, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. Additionally, the engine will meet the engine MACT (40 CFR 63 Subpart ZZZZ) by meeting the NSPS requirements in subpart IIII. This is an area source of hazardous air pollutants, and is not a major source for New Source Review (PSD). The expected emissions from this source are products of combustion of fuel oil. Pollution control equipment is not proposed for this source. This source is located in an area that is attainment for all pollutants.

This engine is pre-2007 (2006 model year) emergency stationary CI ICE and is not a fire pump engine with a displacement of less than 30 liters per cylinder, with a maximum engine power greater than 560 KW (750 HP) is subject to the emission standards in 40 CFR §40.4205, Table 1.

Rules Analysis

Title V ☐ Cond. Major ☐ Minor ☒ Source category listed in 1200-3-9-.01(4)(b)1.(i)? Yes ☐ No ☒

Reason for PSD:	New source above ____ TPY	<input type="checkbox"/>	Sig. increase in ____ emissions	<input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Applicable NSPS:	40 CFR Part 60, Subpart <u>4I</u>	<input checked="" type="checkbox"/>	State Rule 1200-3-16-. ____	<input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Applicable NESHAP:	40 CFR Part 61, Subpart ____	<input type="checkbox"/>	State Rule 1200-3-11-. ____	<input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Applicable NESHAP:	40 CFR Part 63, Subpart <u>4Z</u>	<input checked="" type="checkbox"/>	State Rule 1200-3-31-. ____	<input type="checkbox"/>	N/A <input checked="" type="checkbox"/>

Other Applicable State Rules

TSP Emissions:	1200-3- <u>06</u> - . <u>02(2)</u>	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>	NO _x Emissions:	1200-3- <u>07</u> - . <u>07(2)</u>	<input checked="" type="checkbox"/>	N/A	<input checked="" type="checkbox"/>
SO ₂ Emissions:	1200-3- <u>14</u> - . <u>03(5)</u>	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>	Lead Emissions:	1200-3-____ - . ____	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>
CO Emissions:	1200-3- <u>07</u> - . <u>07(2)</u>	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>	____ Emissions:	1200-3-____ - . ____	<input type="checkbox"/>	N/A	<input type="checkbox"/>
VOC Emissions:	1200-3- <u>07</u> - . <u>07(2)</u>	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>	____ Emissions:	1200-3-____ - . ____	<input type="checkbox"/>	N/A	<input type="checkbox"/>

Visible Emissions from this source not to exceed 20 % opacity per Method 9 (Rule 1200-3-05 - .03(6))

Visible Emissions from _____ not to exceed _____ % opacity per Method _____ (Rule 1200-3-____ - . ____)

Visible Emissions from _____ not to exceed _____ % opacity per Method _____ (Rule 1200-3-____ - . ____)

Comments: _____
